1635 /600

•	19/700,906B ENTERED CRF Processing Date: // File from non-ASCII to ASCII
Changed	e margins in cases where the sequence text was "wrapped" down to the next line. $oldsymbol{\mathcal{Z}}$
Edited a	mat error in the Current Application Data section, specifically:
Edited the applicant	Current Application Data section with the actual current number. The number inputted as the prior application data; or other
Added th	nandatory heading and subheadings for "Current Application Data".
Edited the	Number of Sequences" field. The applicant spelled out a number instead of using an
Changed	e spelling of a mandatory field (the headings or subheadings), specifically:
Corrected	ne SEQ ID NO when obviously incorrect. The sequence numbers that were edited we
Inserted o	corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
Corrected applicant	ubheading placement. All responses must be on the same line as each subheading. aced a response below the subheading, this was moved to its appropriate place. Logs after headings/subheadings. Headings edited included:
Inserted	lons after headings/subheadings. Headings edited included:
Deleted	ra, invalid, headings used by an applicant, specifically:
	150.
Deleted:	non-ASCII "garbage" at the beginning/end of files; secretary initials/filename a numbers throughout text; other invalid text, such as
☐ pag	7 non-ASCII "garbage" at the beginning/end of lifes, 🗀 secretary initials/mentarite a
☐ pag	I non-ASCII garbage at the beginning/end of lifes, Secretary fillials mentante a numbers throughout text; other invalid text, such as
Inserted Correcte	an obvious error in the response, specifically:
Inserted Correcte Edited ic	an obvious error in the response, specifically:
Inserted Correcte Edited ic	andatory headings, specifically: an obvious error in the response, specifically: atifiers where upper case is used but lower case is required, or vice versa.
Inserted Correcte Edited ic Correcte A "Hard	an obvious error in the response, specifically: an error in the Number of Sequences field, specifically:

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/700,906B

DATE: 11/21/2002 TIME: 10:13:50

Input Set: A:\US Serial 09-700906-Sequence-List-11-06-02.txt

Output Set: N:\CRF4\11212002\I700906B.raw

4 <110> APPLICANT: Faustus Forschungs Cie. Translational Cancer Research GmbH

6 <120> TITLE OF INVENTION: Antisense oligonucleotides for treating proliferating cells

8 <130> FILE REFERENCE: PA32470US-01938

10 <140> CURRENT APPLICATION NUMBER: US/09/700,906B

11 <141> CURRENT FILING DATE: 2001-02-26

13 <150> PRIOR APPLICATION NUMBER: DE 198 22 954.2

14 <151> PRIOR FILING DATE: 1998-05-22

16 <160> NUMBER OF SEQ ID NOS: 5

18 <170> SOFTWARE: PatentIn Vers. 2.0

ERRORED SEQUENCES

E--> 1594/-42-

Does Not Comply Corrected Diskette Needed 1582 <210> SEO ID NO: 5

1583 <211> LENGTH: 25 1584 <212> TYPE: DNA

1585 <213> ORGANISM: Artificial sequence

1587 <220> FEATURE:

1588 <223> OTHER INFORMATION: Description of the artificial sequence: missense

Synthetic oligonucleotide

1591 <400> SEQUENCE: 5

delete

1592 agtactcagt aacgcctacg gtaag

25

VERIFICATION SUMMARY

DATE: 11/21/2002 PATENT APPLICATION: US/09/700,906B TIME: 10:13:51

Input Set : A:\US Serial 09-700906-Sequence-List-11-06-02.txt

Output Set: N:\CRF4\11212002\I700906B.raw

L:1594 M:254 E: No. of Bases conflict, this line has no nucleotides.



1600

RAW SEQUENCE LISTING DATE: 11/27/2002 PATENT APPLICATION: US/09/700,906B TIME: 18:13:46

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\11272002\I700906B.raw

```
4 <110> APPLICANT: Faustus Forschungs Cie. Translational Cancer Research GmbH
 6 <120> TITLE OF INVENTION: Antisense oligonucleotides for treating proliferating cells
 8 <130> FILE REFERENCE: PA32470US-01938
10 <140> CURRENT APPLICATION NUMBER: US/09/700,906B
11 <141> CURRENT FILING DATE: 2001-02-26
13 <150> PRIOR APPLICATION NUMBER: DE 198 22 954.2
                                                                      RECEIVED

DEC 0 4 2002
14 <151> PRIOR FILING DATE: 1998-05-22
16 <160> NUMBER OF SEQ ID NOS: 5
18 <170> SOFTWARE: PatentIn Vers. 2.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 12493
                                                                      TECH CENTER 1600/2900
22 <212> TYPE: DNA
23 <213> ORGANISM: Homo sapiens
25 <220> FEATURE:
26 <221> NAME/KEY: CDS
27 <222> LOCATION: (197)..(9964)
29 <400> SEQUENCE: 1
30 ctaccgggcg gaggtgagcg cggcgccggc tectectgcg geggaetttg ggtgcgaett 60
32 gacgagcggt ggttcgacaa gtggccttgc gggccggatc gtcccagtgg aagagttgta 120
34 aatttgette tggeetteee etaeggatta taeetggeet teeeetaegg attataetea 180
36 acttactgtt tagaaa atg tgg ccc acg aga cgc ctg gtt act atc aaa agg 232
                     Met Trp Pro Thr Arg Arg Leu Val Thr Ile Lys Arg
38
40 age ggg gte gae ggt eee cae ttt eee etg age ete age ace tge ttg
                                                                      280
41 Ser Gly Val Asp Gly Pro His Phe Pro Leu Ser Leu Ser Thr Cys Leu
            15
                                20
                                                                      328
44 ttt gga agg ggt att gaa tgt gac atc cgt atc cag ctt cct gtt gtg
45 Phe Gly Arg Gly Ile Glu Cys Asp Ile Arg Ile Gln Leu Pro Val Val
                            35
48 tca aaa caa cat tgc aaa gtt gaa atc cat gag cag gag gca ata tta
49 Ser Lys Gln His Cys Lys Val Glu Ile His Glu Gln Glu Ala Ile Leu
                        50
                                             55
52 cat aat ttc agt tcc aca aat cca aca caa gta aat ggg tct gtt att
53 His Asn Phe Ser Ser Thr Asn Pro Thr Gln Val Asn Gly Ser Val Ile
                    65
                                        70
56 gat gag cct gta cgg cta aaa cat gga gat gta ata act att att gat
                                                                      472
57 Asp Glu Pro Val Arg Leu Lys His Gly Asp Val Ile Thr Ile Ile Asp
                80
                                    85
60 cgt tcc ttc agg tat gaa aat gaa agt ctt cag aat gga agg aag tca
                                                                      520
61 Arg Ser Phe Arg Tyr Glu Asn Glu Ser Leu Gln Asn Gly Arg Lys Ser
62
                               100
                                                    105
64 act gaa ttt cca aga aaa ata cgt gaa cag gag cca gca cgt cgt gtc
                                                                      568
```

65 Thr Glu Phe Pro Arg Lys Ile Arg Glu Gln Glu Pro Ala Arg Arg Val

RAW SEQUENCE LISTING DATE: 11/27/2002 PATENT APPLICATION: US/09/700,906B TIME: 18:13:46

Input Set : A:\PTO.AMC.txt

66 tac ago tct ago tct tot ctt ctg acc cgt ags ago as agot cas gat tcc 69 Ser Arg Ser Ser Phe Ser Ser Asp Pro Asp Glu Lys Ala Gln Asp Ser 70 125																			
98 Ser Arg Ser Ser Phe Ser Ser Asp Pro Asp Glu Lys Ala Gln Asp Ser 130 125 130 135 140 70 125 125 130 135 140 72 aag gcc tat tca aaa atc act gaa gga aaa gtt tca gga aat cct cag 664 73 Lys Ala Tyr Ser Lys Tle Thr Glu Gly Lys Val Ser Gly Asn Pro Gln 74 145 150 155 76 gta cat atc aag aat gtc aaa gaa gac agt acc gca gat gac tca aaa 712 78		66	•	110					115					120					
98 Ser Arg Ser Ser Phe Ser Ser Asp Pro Asp Glu Lys Ala Gln Asp Ser 130 125 135 140 70 125 135 136 140 72 aag gcc tat tca aaa atc act gaa gga aaa gtt tca gga aat cct cag 664 73 Lys Ala Tyr Ser Lys Tle Thr Glu Gly Lys Val Ser Gly Asn Pro Gln 74 145 150 155 76 gta cat atc aag aat gtc aaa gaa gac agt acc gca gat gac tca aaa 712 78 78 160 165 170 80 gac agt gtt gct cag gga aca act aat gtt cat tc tca gaa cat gct 81 Asp Ser Lys 18 160 165 170 80 gac agt gtt gct cag gga aca act aat gtt cat tc tca gaa cat gct 81 Asp Ser Val Ala Gln Gly Thr Thr Asn Val His Ser Ser Glu His Ala 82 175 180 185 185 185 180 185 185 185 180 185 185 180 185 185 185 180 180 185 185 180 180 180 180 180 180 180 180 180 180		68	tca	aga	tct	agc	ttc	tct	tct	gac	cct	gat	gag	aaa	gct	caa	gat	tcc	616
125																			
73 Lys Ala Tyr Ser Lys Ile Thr Glu Gly Lys Val Ser Gly Asn Pro Gln				-						-		_		_			_		
73 Lys Ala Tyr Ser Lys Ile Thr Glu Gly Lys Val Ser Gly Asn Pro Gln		72	aaq	qcc	tat	tca	aaa	atc	act	qaa	qqa	aaa	att	tca	gga	aat	cct	caq	664
74 145 150 155 76 gta cat atc aag aat gtc aaa gac aga cac gat acc gca gat gac tca aaa 712 77 Val His IIe Lys Asn Val Lys Glu Asp Ser Thr Ala Asp Asp Ser Lys 160 165 170 80 gac agt gtt gct cag gga aca act act agt cat ct ca gac cat gct 165 170 760 81 Asp Ser Val Ala Gln Gly Thr Thr Asn Val His Ser Ser Glu His Ala 180 185 180 185 84 gga cgt aat ggc aga aat gca gct gat ccc att tct ggg gat ttt aaa 85 Gly Arg Asn Gly Arg Asn Ala Ala Asp Pro Ile Ser Gly Asp Phe Lys 86 190 195 200 856 88 gaa att cc agc gtt aaa tta gtg agc cgt tat gga gaa att gaag tct 856 190 195 200 856 89 Glu Ile Ser Ser Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser 220 225 220 225 220 225 220 226 240 255 220 904 255 220 904 904 952 961 195 220 904 952 961 195 220 856 904 904 904 904 904 904 904 904 904 904 904 904 904 904			-	-						_			-					_	
76 gta cat atc aag aat gtc aaa gaa gac agt acc gca gat gac tca aaa 712 77 Val His Ile Lys Asn Val Lys Glu Asp Ser Thr Ala Asp Asp Ser Lys 78											1	-			1				
170 Nal His Ile Lys Asn Val Lys Glu Asp Ser Thr Ala Asp Asp Ser Lys 170			αta	cat	atc	aaα	aat	atic	aaa	gaa	gac		acc	αca	gat.	gac		aaa	712
78 160 165 170 80 gac agt gtt gct cag gga aca act aat gtt cat tcc tca gaa cat gct 760 81 Asp Ser Val Ala Gln Gly Thr Thr Asn Val His Ser Ser Glu His Ala 180 84 gga cgt aat ggc aat ggc aga aat gca gct gat ccc att tct ggg gat ttt aaa 808 85 Gly Arg Asn Gly Arg Asn Ala Ala Asp Pro Ile Ser Gly Asp Phe Lys 200 88 gaa att tcc agc gtt aaa tta gtg agc cgt tat gga gaat tg aag tct 856 89 Glu Ile Ser Ser Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser 220 92 gtt ccc act aca caca tct ctt gac aat agc aaa aaa aat gaa tct ccc 904 92 25 230 235 92 2tt tgg ag ctt tat gag tca gtg aag aaa gag ttg gat gta aaa tca 952 94 225 230 235 96 ttt tgg aag ctt tat gag tca gtg aag aaa gag ttg gat gta aaa tca 952 97 Phe Trp Lys Leu Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser 250 98 240 245 250 100 caa aaa gaa aat gtc cta gta ttg aga aaa tcg gag ttg tta cag act 1000 101 fln Lys Glu Asn Val Leu Gln Tyr Cy																			
80 gac agt gtt gct cag gga aca act aat gtt cat tcc tca gaa cat gct					110	_	11011	• • •	23,0	010	_				p	_		270	
81 Asp Ser Val Åla Gln Gly Thr Thr Asn Val His Ser Ser Glu His Åla 82		-	aac	ant	att		cad	aaa	aca	act		att	cat	tcc	tca		cat	act	760
82			_	_	-	-	_					-				_		_	700
84 gga cgt aat ggc aga aat gca gct gat ccc att tct ggg gat ttt aaa 808 85 Gly Arg Asn Gly Arg Asn Ala Ala Asp Pro Ile Ser Gly Asp Phe Lys 61 190 195 200 200 88 gaa att tcc agc gtt aaa tta gtg agc cgt tat gga gaa ttg aag tct 856 96 Glu Ile Ser Ser Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser 220 205 210 215 220 220 292 gtt ccc act aca caa tgt ctt gac aat agc aaa aaa aat gaa tct ccc 904 225 230 235 96 6 ttt tgg aag ctt tat gag tca gtg aaa gag ttg gat gta aaa tca 952 97 Phe Trp Lys Leu Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser 88 240 245 250 260 265 100			лэр	DCI		ліа	G111	Сту	1111		ASII	Val	111.5	DCI		Olu	1113	Aια	
85 Gly Arg Asn Gly Arg Asn Ala Ala Asp Pro Ile Ser Gly Asp Phe Lys 86 190 195 200 88 gaa att toc ago gtt aaa tta gtg ago cgt tat gga gaa ttg aag tct 89 Glu Ile Ser Ser Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser 90 205 210 215 220 92 gtt coc act aca caa tgt ctt gac aat ago aaa aaa aat gaa tot ccc 904 225 230 235 96 ttt tgg aag ctt tat gag toa gtg aag aag agg ggt gg			~~~	cat		aac	202	22t	003		ast.	000	2++	+ <+		ast.	+++	222	808
86				_			_		-	_	-					-			000
88 gaa att toc agc gtt aaa tta gtg agc cgt tat gga gaa ttg aag tct 89 Glu Ile Ser Ser Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser 90 205 210 220 92 gtt coc act aca caa tgt ctt gac aat agc aaa aaa aat gaa tct coc 93 Val Pro Thr Thr Gln Cys Leu Asp Asn Ser Lys Lys Asn Glu Ser Pro 94 225 230 235 96 ttt tgg aag ctt tat gag tca gtg aag aaa gag ttg gat gta aaa tca 952 97 Phe Trp Lys Leu Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser 98 240 245 250 100 caa aaa gaa aat gtc cta cag tat tgt aga aaa tct gga tta caa act 1000 101 Gln Lys Glu Asn Val Leu Gln Tyr Cys Arg Lys Ser Gly Leu Gln Thr 102 255 260 265 104 gat tac gca aca gag aaa gat ggt gat gta aca ct 104 gat tac gca aca gag aaa gat gct gat ggt tta caa ggg gag acc 105 Asp Tyr Ala Thr Glu Lys Glu Ser Ala Asp Gly Leu Gln Gly Glu Thr 106 270 108 caa ctg ttg gtc tcg cgt aag tca aga cca aaa tct ggt ggg agc ggc 109 Gln Leu Leu Val Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly 110 285 290 295 300 112 cac gct gtg gca gag cct gct tca cct gaa caa gag ctt gac cag act 1144 13 His Ala Val Ala Glu Pro Ala Ser Pro Glu Gln Glu Leu Asp Gln Asn 114 305 310 315 116 aag ggg aag gga aga gac gtg gag tct gtt cag act ccc aga aag gct 1192 117 Lys Gly Lys Gly Arg Asp Val Glu Ser Val Gln Thr Pro Ser Lys Ala 118 320 325 330 120 gtg ggc gcc agc ttt cct ctc tat gag ccg gct aaa atg aag acc cct 121 Val Gly Ala Ser Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro 122 335 340 345 124 gta caa tat tca cag caa caa aat tct cca caa aac cat aag acc aaa 128 128 gac ctg tat act act ggt aga gag aga ct ctg tca caa aat ct ggt aga aac aaa 128 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser			вту	_	ASII	GTÀ	Arg	ASII		мта	ASP	FIO	TTE		СТУ	АЗР	rne	гуз	
89 Glu Ile Ser Ser Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser 90 205 210 215 220 292 gtt ccc act aca caa tgt ctt gac aat agc aaa aaa aat gaa tct ccc 904 93 Val Pro Thr Thr Gln Cys Leu Asp Asn Ser Lys Lys Asn Glu Ser Pro 94 225 230 235 96 ttt tgg aag ctt tat gag tca gtg aag aaa gag ttg gat gta aaa tca 952 97 Phe Trp Lys Leu Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser 98 240 245 250 260 265 100 caa aaa gaa aat gtc cta cag tat tgt aga aaa tct gga tta caa act 1000 101 Gln Lys Glu Asn Val Leu Gln Tyr Cys Arg Lys Ser Gly Leu Gln Thr 102 255 260 265 104 gat tac gaa aca gag aag agt ggt ggt tta cag ggg gag acc 1048 gat tac gaa aca gag aaa gaa agt gct gat ggt tta cag ggg gag acc 1048 gat tac gaa aca gag aaa gaa agt gct gat ggt tta cag ggg gag acc 1096 109 Gln Leu Leu Val Ser Arg Lys Ser Arg Pro Lys Ser Gly Leu Gln Thr 106 270 275 280 109 Gln Leu Leu Val Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly 100 285 290 295 300 112 cac gct gtg gca gag cct gct tca cct gaa caa gag ctt gac cag aac 1144 118 is Ala Val Ala Glu Pro Ala Ser Pro Glu Gln Glu Leu Asp Gln Asn 114 305 116 aag ggg aag gag ag ag ggt ggg ggg ggg g			~		+	200	~++			~+~	200	~~+	+-+		~~~	++~	222	+ a+	056
90 205																			030
92 gtt ccc act aca caa tgt ctt gac aat agc aaa aaa aat gaa tct ccc 93 Val Pro Thr Thr Gln Cys Leu Asp Asn Ser Lys Lys Asn Glu Ser Pro 94				тте	ser	ser	vaı	_	ьeu	vaı	ser	Arg	_	GTÀ	GIU	ьeu	ьys		
93 Val Pro Thr Thr Gln Cys Leu Asp Asn Ser Lys Lys Asn Glu Ser Pro 94											4-								004
94																			904
96 ttt tgg aag ctt tat gag tca gtg aag aaa gag ttg gat gta aaa tca 97 Phe Trp Lys Leu Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser 98			vaı	Pro	Thr	Thr		Cys	ьeu	Asp	Asn		гуѕ	ьуs	Asn	GIU		Pro	
97 Phe Trp Lys Leu Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser 98																			050
98																			952
100			Phe	Trp	ьуs		Tyr	Glu	Ser	Val	_	ьys	Glu	Leu	Asp		ьуs	Ser	
101 Gln Lys Glu Asn Val Leu Gln Tyr Cys Arg Lys Ser Gly Leu Gln Thr 102																			1000
102					_		_		_		_	_							1000
104 gat tac gca aca gag aaa gaa agt gct gat ggt tta cag ggg gag acc 1048 105 Asp Tyr Ala Thr Glu Lys Glu Ser Ala Asp Gly Leu Gln Gly Glu Thr 106				ь Гуз			ı val	Leu	GLr	_	_	s Arg	l ras	s Sei	_		ı GIr	n Thr	
105 Asp Tyr Ala Thr Glu Lys Glu Ser Ala Asp Gly Leu Glu Glu Thr 106 270 275 275 280 280 1096 1096 108 caa ctg ttg gtc tcg cgt aag tca aaa tct ggt ggg agc ggc 1096 109 Gln Leu Leu Val Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly 300 1196 112 cac gct gtg gag cct gct tca cct gag cac aag cac aag cac aag cac aag cac aag cac cag aac aag cac <																			1040
106																			1048
108 caa ctg ttg gtc tcg cgt aag tca aga cca aaa tct ggt ggg agc ggc 1096 109 Gln Leu Leu Val Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly 110 285			_	_		a Thr	. GIU	ı гуз			: Ala	a Asp) GT2			ı GIZ	/ GIV	ı Thr	
109 Gln Leu Leu Val Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly 110 285																			1000
110 285																			1096
112 cac gct gtg gca gag cct gct tca cct gaa caa gag ctt gac cag aac 1144 113 His Ala Val Ala Glu Pro Ala Ser Pro Glu Gln Glu Leu Asp Gln Asn 114					і Lei	ı Val	. Ser	_	_	Sei	. Arg	y Pro	-		: GLy	, GT	, Ser	_	
113 His Ala Val Ala Glu Pro Ala Ser Pro Glu Gln Glu Leu Asp Gln Asn 305 310 315 116 aag ggg aag gga aga gac gtg gag tct gtt cag act ccc agc aag gct 1192 117 Lys Gly Lys Gly Arg Asp Val Glu Ser Val Gln Thr Pro Ser Lys Ala 320 325 330 120 gtg ggc gcc agc ttt cct ctc tat gag ccg gct aaa atg aag acc cct 1240 121 Val Gly Ala Ser Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro 122 335 340 345 124 gta caa tát tca cag caa caa aat tct cca caa aaa cat aag aac aaa 1288 125 Val Gln Tyr Ser Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys 350 128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser																			
114																			1144
116 aag ggg aag gga aga gac gtg gag tct gtt cag act ccc agc aag gct 1192 117 Lys Gly Lys Gly Arg Asp Val Glu Ser Val Gln Thr Pro Ser Lys Ala 118				Alá	ı Val	l Ala			Ala	Sei	r Pro			ı GI	ı Leu	ı Asp			
117 Lys Gly Lys Gly Arg Asp Val Glu Ser Val Gln Thr Pro Ser Lys Ala 118 320 325 330 120 gtg ggc gcc agc ttt cct ctc tat gag ccg gct aaa atg aag acc cct 1240 121 Val Gly Ala Ser Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro 122 335 340 345 124 gta caa tát tca cag caa caa aat tct cca caa aaa cat aag aac aaa 1288 125 Val Gln Tyr Ser Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys 126 350 355 360 128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser																			
118																			1192
120 gtg ggc gcc agc ttt cct ctc tat gag ccg gct aaa atg aag acc cct 1240 121 Val Gly Ala Ser Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro 122 335 340 345 124 gta caa tat tca cag caa caa aat tct cca caa aaa cat aag aac aaa 1288 125 Val Gln Tyr Ser Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys 126 350 355 360 128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser				Gly	, Lys	s Gly	' Arg	Asp	Val	. Glu			. Glr	1 Thi	Pro			s Ala	
121 Val Gly Ala Ser Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro 122																			
122 335 340 345 124 gta caa tat tca cag caa caa aat tct cca caa aaa cat aag aac aaa 1288 125 Val Gln Tyr Ser Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys 128 126 350 355 360 128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser 1336																			1240
124 gta caa tát tca cag caa caa aat tct cca caa aaa cat aag aac aaa 1288 125 Val Gln Tyr Ser Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys 126 350 355 360 128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser				. Gl	/ Ala	a Ser	Phe	Pro	Let	_		Pro) Ala	Lys		_	Thr	Pro	
125 Val Gln Tyr Ser Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys 126 350 355 360 128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser																			
126 350 355 360 128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser																			1288
128 gac ctg tat act act ggt aga aga gaa tct gtg aat ctg ggt aaa agt 1336 129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser					_	Ser	Gln	Gln			ı Ser	Pro	Glr	ı Lys	His	Lys	s Asr	Lys	
129 Asp Leu Tyr Thr Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser																			
																			1336
130 365 370 375 380			_		туг	Thr	Thr	Gly	Arg	Arg	յ Glu	ı Ser			ı Leu	Gl3	, Lys		
	-	130	365					370					375	5				380	

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/700,906B TIME: 18:13:46

DATE: 11/27/2002

Input Set : A:\PTO.AMC.txt

132	gaa	ggc	ttc	aag	gct	ggt	gat	aaa	act	ctt	act	ccc	agg	aag	ctt	tca	1384
							Āsp										
134					385					390					395		
136	act	aga	aat	cga	aca	сса	gct	aaa	gtt	gaa	gat	gca	gct	gac	tct	gcc	1432
137	Thr	Arg	Asn	Arg	Thr	Pro	Ala	Lys	Val	Glu	Asp	Ala	Ala	Asp	Ser	Ala	
138				400					405					410			
140	act	aag	cca	gaa	aat	ctc	tct	tcc	aaa	acc	aga	gga	agt	att	cct	aca	1480
141	Thr	Lys	Pro	Glu	Asn	Leu	Ser	Ser	Lys	Thr	Arg	Gly	Ser	Ile	Pro	Thr	
142			415					420					425				
144	gat	gtg	gaa	gtt	ctg	cct	acg	gaa	act	gaa	att	cac	aat	gag	cca	ttt	1528
145	Asp	Val	Glu	Val	Leu	Pro	Thr	Glu	Thr	Glu	Ile	His	Asn	Glu	Pro	Phe	
146		430					435					440					
148	tta	act	ctg	tgg	ctc	act	caa	gtt	gag	agg	aag	atc	caa	aag	gat	tcc	1576
149	Leu	Thr	Leu	Trp	Leu	Thr	Gln	Val	Glu	Arg	Lys	Ile	Gln	Lys	Asp	Ser	
	445					450					455					460	
							ttg										1624
	Leu	Ser	Lys	Pro		Lys	Leu	Gly	Thr		Ala	Gly	Gln	Met		Ser	
154					465					470					475		
							tca										1672
	Gly	Leu	Pro	_	Leu	Ser	Ser	Val	_	Ile	Asn	Asn	Phe	_	Asp	Ser	
158				480					485					490			1700
							ata										1720
	lle	Asn		Ser	GLu	GLY	Ile		Leu	rys	Arg	Arg		vaı	Ser	Pne	
162			495					500					505	+	+	+	1760
							gaa										1768
	СТЙ	_	HIS	ьеи	Arg	Pro	Glu 515	ьeu	Pne	Asp	GIU	520	ьеи	PLO	PIO	ASII	
166	200	510	at a	222	200	aaa	gaa	~~~	663	200	222		220	tot	cta	at a	1816
							Glu										1010
	525	FIO	ьеи	пуз	Arg	530	Giu	лια	110	1111	535	ALG	цуз	Der	ncu	540	
		cac	act	cca	cct		ctg	aad	aaa	atc		aaα	gaa	cad	cct		1864
							Leu										
174	1100	1110		110	545	• • • •	100	2,0	2,0	550		2,2	0	0	555		
	cca	t.ca	gga	aaa		gag	tca	aat	tca		atc	cat	ata	gaa		aaσ	1912
							Ser										
178			1	560				2	565					570		-	
	qca	caa	agc	ttq	att	ata	agc	cct	сса	qct	cct	agt	cct	agg	aaa	act	1960
							Ser										
182			575					580					585		-		
184	сса	gtt	gcc	agt	gat	caa	cgc	cgt	agg	tcc	tgc	aaa	aca	gcc	cct	gct	2008
185	Pro	Val	Āla	Ser	Asp	Gln	Arg	Arg	Arg	Ser	Cys	Lys	Thr	Ala	Pro	Ala	
186		590			_		595	_				600					
188	tcc	agc	agc	aaa	tct	cag	aca	gag	gtt	cct	aag	aga	gga	gga	gaa	aga	2056
189	Ser	Ser	Ser	Lys	Ser	Gln	Thr	Glu	Val	Pro	Lys	Arg	Gly	Gly	Glu	Arg	
	605					610					615					620	
				_			aag	_				-	_	_			2104
193	Val	Ala	Thr	Cys	Leu	Gln	Lys	Arg	Val	Ser	Ile	Ser	Arg	Ser		His	
194					625		tgt			630					635		2152

RAW SEQUENCE LISTING DATE: 11/27/2002 PATENT APPLICATION: US/09/700,906B TIME: 18:13:46

Input Set : A:\PTO.AMC.txt

197 198	Asp	Ile	Leu	Gln 640	Met	Ile	Cys	Ser	Lys 645	Arg	Arg	Ser	Gly	Ala 650	Şer	Glu	
200	gca	aat	ctg	att	gtt	gca	aaa	tca	tgg	gca	gat	gta	gta	aaa	ctt	ggt	2200
201	Ala	Asn	Leu	Ile	Val	Ala	Lys	Ser	Trp	Ala	Asp	Val	Val	Lys	Leu	Gly	
202			655					660					665				
204	gca	aaa	caa	aca	caa	act	aaa	gtc	ata	aaa	cat	ggt	cct	caa	agg	tca	2248
205	Ala	Lys	Gln	Thr	Gln	Thr	Lys	Val	Ile	Lys	His	Gly	Pro	Gln	Arg	Ser	
206		670					675					680					
208	atg	aac	aaa	agg	caa	aga	aga	cct	gct	act	cca	aag	aag	cct	gtg	ggc	2296
		Asn	Lys	Arg	Gln	Arg	Arg	Pro	Ala	Thr	Pro	Lys	Lys	Pro	Val	Gly	
210	685					690					695					700	
	_	_	cac	_			_				-				-		2344
	Glu	Val	His	Ser		Phe	Ser	Thr	Gly		Ala	Asn	Ser	Pro	-	Thr	
214					705					710					715		
			ata			_			_		_				_	_	2392
	Ile	Ile	Ile	_	Lys	Ala	His	Thr		Lys	Val	His	Val		Ala	Arg	
218				720					725					730			
			aga														2440
	Pro	Tyr	Arg	Val	Leu	Asn	Asn		Ile	Ser	Asn	GIn	_	Met	Asp	Phe	
222			735					740					745				0400
			gat														2488
	ьуѕ		Asp	ьeu	Ser	СТА		Ата	GIU	мет	Pne	_	Tnr	Pro	vaı	гàг	
226	~~~	750			++~		755		+~+		2+0	760	-++	+	a a +	+ 00	2536
			ccg Pro	_	_		_		_			_					2336
230		GIII	PIO	GIII	ьeu	770	ser	TIIL	Cys	птэ	775	нта	116	Ser	ASII	780	
		22t	ttg	ctt	aas		cac	+++	C22	aa =		a t	+ 02	aas	α 2 2		2584
			Leu				_					-			-	_	2304
234	OLU	ASII	шси	пси	785	цуз	0111	1110	0111	790	1111	1151	JCI	ОТУ	795	Old	
	cct	cta	ctc	ccc		tca	gag	aat	ttt		gga	aat	ata	ttc		agt.	2632
		_	Leu					_								-	
238				800					805					810			
	qca	cag	aat	gca	qca	aaa	caq	cca	tct	gat	aaa	tgc	tct	qca	agc	cct	2680
			Asn														
242			815			_		820		_	_		825				
244	ccc	tta	aga	cgg	cag	tgt	att	aga	gaa	aat	gga	aac	gta	gca	aaa	acg	2728
245	Pro	Leu	Arg	Arg	Gln	Cys	Ile	Arg	Glu	Asn	Gly	Asn	Val	Ala	Lys	Thr	
246		830					835					840					
248	CCC	agg	aac	acc	tac	aaa	atg	act	tct	ctg	gag	aca	aaa	act	tca	gat	2776
249	Pro	Arg	Asn	Thr	Tyr	Lys	Met	Thr	Ser	Leu	Glu	Thr	Lys	Thr	Ser	Asp	
250						850					855					860	
			aca														2824
	Thr	Glu	Thr	Glu		Ser	Lys	Thr	Val	Ser	Thr	Val	Asn	Arg	Ser	Gly	
254					865					870					875		
			aca														2872
	Arg	Ser	Thr		Phe	Arg	Asn	Ile		Lys	Leu	Pro	Val		Ser	Lys	
258				880					885					890			
			gaa														2920
261	Ser	GLu	Glu	Thr	Asn	Thr	GLu	TTe	۷al	GLu	Cys	Пе	Leu	гуs	Arg	GTA	

RAW SEQUENCE LISTING DATE: 11/27/2002 PATENT APPLICATION: US/09/700,906B TIME: 18:13:46

Input Set : A:\PTO.AMC.txt

262			005					900					905				
262	~~~	~ ~ ~	895	202	at a	at a	a aa		200	202	~~~	~~~		2+4	224	~~~	2968
	_	-	_							_	_			_	aag		2300
	GTII	-	АТА	THE	ьeu	ьеи		GIII	Arg	Arg	GIU	_	GIU	met	Lys	Gru	
266		910					915					920		++-		~	2016
		-	_						_	-			_		aaa		3016
		Glu	Arg	Pro	Pne		Thr	Tyr	Lys	GIU		тте	GIU	ьeu	Lys		
	925					930					935					940	2064
		_	_	_	-		_	_	_	_		_			ggg		3064
	Asn	Asp	Glu	Lys		Lys	Ala	Met	Lys	_	Ser	Arg	Thr	Trp	Gly	Gin	
274					945					950					955		
		_	_		-		_	_		-		_	_	-	cct		3112
	Lys	Cys	Ala		Met	Ser	Asp	Leu		Asp	Leu	Lys	Ser		Pro	Asp	
278				960					965					970			
															caa		3160
	Thr	Glu	Leu	Met	Lys	Asp	Thr	Ala	Arg	Gly	Gln	Asn		Leu	Gln	Thr	
282			975					980					985				
284	caa	gat	cat	gcc	aag	gca	cca	aag	agt	gag	aaa	ggc	aaa	atc	act	aaa	3208
285	Gln	Asp	His	Ala	Lys	Ala	Pro	Lys	Ser	Glu	Lys	Gly	Lys	Ile	Thr	Lys	
286		990					995					1000					•
288	atg	ccc	tgc	cag	tca	tta	caa	cca	gaa	cca	ata	aac	acc	cca	aca	cac	3256
289	Met	Pro	Cys	Gln	Ser	Leu	Gln	Pro	Glu	Pro	Ile	Asn	Thr	Pro	Thr	His	
290	1005	5				1010				-	1015					1020	
292	aca	aaa	caa	cag	ttg	aag	gca	tcc	ctg	ggg	aaa	gta	ggt	gtg	aaa	gaa	3304
293	Thr	Lys	Gln	Gln	Leu	Lys	Ala	Ser	Leu	Gly	Lys	Val	Gly	Val	Lys	Glu	
294					1025					1030					1035		
296	gag	ctc	cta	gca	gtc	ggc	aag	ttc	aca	cgg	acg	tca	ggg	gag	acc	acg	3352
297	Glu	Leu	Leu	Ala	Val	Gly	Lys	Phe	Thr	Arg	Thr	Ser	Gly	Glu	Thr	Thr	
298			-	1040					1045					1050			
300	cac	acg	cac	aga	gag	cca	gca	gga	gat	ggc	aag	agc	atc	aga	acg	ttt	3400
301	His	Thr	His	Arg	Glu	Pro	Ala	Gly	Asp	Gly	Lys	Ser	Ile	Arg	Thr	Phe	
302		-	1055				-	1060					1065				
304	aag	gag	tct	cca	aag	cag	atc	ctg	gac	cca	gca	gcc	cgt	gta	act	gga	3448
305	Lys	Glu	Ser	Pro	Lys	Gln	Ile	Leu	Asp	Pro	Ala	Ala	Arg	Val	Thr	Gly	
306		1070					1075					1080					
308	atg	aag	aag	tgg	cca	aga	acg	cct	aag	gaa	gag	gcc	cag	tca	cta	gaa	3496
309	Met	Lys	Lys	Trp	Pro	Arg	Thr	Pro	Lys	Glu	Glu	Ala	Gln	Ser	Leu	Glu	
310	1085	5	_	_		1090				-	1095					1100	
312	gac	ctq	gct	ggc	ttc	aaa	gag	ctc	ttc	caq	aca	cca	ggt	ccc	tct	gag	3544
															Ser		
314	-				1105	-			. :	1110			-		1115		
316	gaa	tca	atq			gag	aaa	act	acc	aaa	ata	qcc	tgc	aaa	tct	cca	3592
															Ser		
318				1120	•		-		1125	_			_	1130			
	сса	сса			ata	σac	act	cca	aca	agc	aca	aaσ	caa	taa	cct	aaq	3640
															Pro		
322			1135			- I-		1140					1145	- 1-		<u> </u>	
	aσa			agg	aaa	gca			gag	gaa	gaa			αса	ctc	agg	3688
															Leu		
326	-	L150	u	9	_,,,		1155		<u></u>	J_ u		1160				9	
220	-					-					-						

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/700,906B

DATE: 11/27/2002 TIME: 18:13:47

Input Set : A:\PTO.AMC.txt